

Tripartite Exercise:

Lessons Learned

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Tripartite Exercise 2000

Summary Report of the Functional Exercise- International Aspects

November 6-9, 2000

The functional part of Tripartite Exercise 2000 was held from November 6 through November 9, 2000 in all three countries, Mexico, the United States and Canada. The exercise focused on communication and the use of vaccine by testing several documents that were prepared jointly and several documents that were prepared by each country. This report focuses on the part of the exercise that tested the tripartite documents including the following:

- The Tripartite Animal Health Emergency Communication Plan
- The Decision Tree/Matrix for FMD Vaccine Use
- The Protocol for the FMD Vaccination Program (North American Foot and Mouth Disease Vaccine Bank (NAFMDVB) and appendices on Identification of FMD Vaccinated Animals and Vaccine Distribution (when more than one country needs vaccine)
- The Contract of the North American FMD Vaccine Bank, effective 10/08/1999

On November 14 and 15, a review group, consisting of the tripartite planning team and the official evaluators in each country, met to discuss the results of the exercise. As a result of the meeting, the exercise review group recommends the following (see appendix of the report for a summary list of recommendations):

1. Develop an on-going Tripartite Emergency Management Working Group. This Working Group would explore potential areas of technical cooperation among the three countries and could coordinate the completion of recommendations adopted by the Tripartite. To be effective, the members of the working group should be in a position in their own country to authorize personnel and to follow through on tripartite emergency management initiatives. This Working Group would be similar to one established among the quadrilateral partners of the United States, Canada, New Zealand and Australia and could interact with that group when appropriate.

The review group agreed that developing working relationships among Tripartite Emergency Management officials other than CVO is very important, perhaps the most important recommendation to come out of the exercise. There were many times during the exercise when the response would have been improved if officials at lower levels in each country communicated with each other, shared information and made joint decisions. To enhance interactions during an outbreak, it is important to develop relationships in advance. This working group would develop key relationships among themselves and would provide an on-going mechanism to encourage other collaborative efforts as well.

2. Revise the Tripartite Animal Health Emergency Communication Plan to:

- *Clarify definitions for the presumptive and confirmed diagnosis (so that all three countries agree) and the communication associated with each diagnosis.* There was confusion about the definition of presumptive and confirmed diagnosis so that some communication took place during the exercise before the presumptive and confirmed diagnoses were completed. Either the definitions need to be clarified and the diagnostic tests specified or the tasks associated with them need to be revised.
- *Prompt CVO's or other appropriate personnel to talk to each other if agro-terrorism is suspected.* During the exercise, when a terrorist group claimed responsibility for the

outbreak, there was activity in each country, but representatives in each country did not talk to each other. It is important that at the very least, this information is shared among the three CVO's or other appropriate personnel.

- *Encourage each country to have someone (other than the CVO) responsible for tracking the completion of the communication tasks outlined in the plan and communicating progress within each country.* During the exercise, no one took responsibility for tracking and communicating in each country. The review group thought that it would be best if responsibility were assigned for tracking not only communication tasks but other response tasks as well.
- *Encourage sharing of information at a technical level during an outbreak.* During the exercise, there was information, especially epidemiological information about the outbreak that was available within each country that was not shared with the other two countries. In a real outbreak, it would be crucial to share epidemiological information, especially if there were outbreaks in all three countries or if the outbreak is near a Tripartite border.
- *Authorize headquarters and field personnel to communicate with their Tripartite counterparts during an outbreak and give them the resources to do so.* There were times during the exercise when the response would have been improved if response officials at similar levels in each country communicated with each other, shared information and made joint decisions. When joint decisions at levels other than CVO were not appropriate, it would have been helpful if the officials from each country, communicated, shared information and then offered recommendations to their respective CVOs. To accomplish this recommendation, the review group suggests that in addition to establishing the working group mentioned earlier, CVOs in each country should clearly tell responders that in an outbreak, it is okay to collaborate with Tripartite counterparts. The review group cautions that horizontal and vertical communication within each country about decisions or recommendations made would be crucial to a smooth, effective response to an outbreak.

In addition to organizational barriers, there were language barriers. In the CVO communications, the US CVO, who is bilingual, translated for the Mexican and Canadian CVOs. To facilitate communication, each country may need to consider hiring professional translators or ensure that bilingual staff members are available.

- *Clear direction for the US CVO to communicate to the Contracting Officer's Representative (COR) how the vaccine doses will be split among the three countries and how the doses for each country will be delivered.* During the exercise, when the three CVOs decided to split the shipments, the COR was not notified. As a result, there was confusion about the amount each country was supposed to receive, how they would be delivered, where and when. Clear direction for the US CVO to communicate with the COR should be included in the Protocol for the FMD Vaccination Program as well. In addition, the person who is responsible for tracking tasks (see our suggestion above) could help to ensure that this is carried out.

3. Incorporate the use of the Decision Tree/Matrix more effectively into the response of each country by doing the following:

- *Incorporate the Decision Tree/Matrix into the response plans in each country.* The review group thought that it is important to reference this document in individual country response plans to ensure its use. If each country has not already done this, individual country response plans should be revised to include the use of the Decision Tree/Matrix.
- *Train those responsible for making the decision on the use of vaccine to use the Decision Tree/Matrix effectively.* While each country used the Decision Tree/Matrix some during the exercise, no country used it as effectively as it could be used. For example in the US, the staff was trying to make the decision rather than presenting the information collected to the CVO so he could make the decision. The review group agreed that training in how to use the document would be useful for both the decision makers and the staffs that would supply the information needed to make the decision.
- *Train epidemiologists in each country to use the model as a tool for understanding disease spread parameters.* During the exercise, many wanted to be able to run the model so that they could predict what would happen in the outbreak and know what tools to use to fight the spread of the disease and when to use them. Running the model during an outbreak for this purpose is not practical, and the model is not sophisticated enough as a predictive tool to be useful. The review group thought that a better approach would be to train groups of epidemiologists in each country in the use of the model so they are prepared with a better understanding of how different parameters affect the spread of a disease. After they are trained, it would be important to allow these epidemiologists in each country time to run the model using real geographic and livestock data in different scenarios in order to predict the most appropriate course of action to take. Then, in an actual outbreak, they would be able to offer better advice on what tools to use and when to use them.
- *Explore disposition of vaccinated animals (Industry should be involved in this discussion).* During the exercise, there was limited or no discussion of the use of vaccinated animals and their products. The reviewers thought that the players would have had more discussion if the exercise were not so accelerated. Therefore, to ensure that all possibilities are considered, the review group recommends that each country explore options and include their industries in that discussion. When policies are developed, it is important for all three countries to harmonize those policies so that the public in all three countries are assured that their country is handling their vaccinated animals safely and appropriately.

4. Revise the Protocol for the FMD Vaccination Program to include:

- *The proposed Protocol for the Identification of FMD Vaccinated Animals Through Final Disposition.* During the exercise, this document was not challenged by any of the three countries. The review group suggests that it be adopted officially as part of the overall protocol at the Tripartite meeting in March 2001, and the action items included in the proposal be completed. In doing so, tags will be available and a procedure will be in place for ordering tags in the event of an actual outbreak.
- *A revised Vaccine Distribution Plan.* This document was not used during the exercise because all three countries did not agree on its content ahead of time. All three countries

need to agree on the plan and then the plan needs to be incorporated in the overall Protocol for the FMD Vaccination Program.

- *Clear direction for the US CVO to communicate to the Contracting Officer's Representative (COR) how the vaccine doses will be split among the three countries and how the doses for each country will be delivered.* During the exercise, when the three CVOs decided to split the shipments, the COR was not notified. As a result, there was confusion about the amount each country was supposed to receive, how they would be delivered, where and when. As was mentioned earlier, this should be included in the Tripartite Animal Health Emergency Communication Plan as well.
- *Continue to schedule ~~for~~ regular periodic reviews of the strains of FMD covered by the stocks of VAC in the NAFMDVB.* With only two VACs currently in stock in the bank, and many outbreaks in progress in the world, it is likely that the VACs available would not provide protection against some of the strains that could cause an outbreak in North America. The contract was recently revised to address this shortfall, and the regular reviews scheduled during the USAHA meeting each year should continue with the help of the NAFMDVB technical committee.
- *Include standards for movement of vaccinates and their products among the tripartite countries.* It was clear in the exercise that during an outbreak, there would be pressure to move vaccinated animals or their products among the three countries. This could occur before the outbreak is over and possibly before each country requests OIE "freedom from FMD" status. Standards for how to move these animals and their products should be included in the protocol and should allow for other rules and regulations (such as import restrictions for other diseases such as Tuberculosis or Brucellosis) to be followed.
- *Designated backups to the COR and COTR.* During the exercise, the COR and the COTR were one and the same person because the person who had the COR job previously had been recently reassigned. Because of the demands of the outbreak, neither the COR nor the COTR was always readily available. The review group thought it was important to designate a backup for both positions so that someone is always available. This may need to be included in the contract as well.

5. Clarify the following about the NAFMDVB Contract:

- *Validate that the A-81 VAC is low risk for BSE.* Even though this was apparently done as part of the exercise, it would be important to follow up and make sure that there is evidence that A-81 is low risk for BSE. This should be documented and the documentation should be kept with the contract so that there is no question in the event of an actual outbreak.
- *Clarify what list is to be used to determine acceptable (low) risk for BSE.* The contract specifies that Vaccine Antigen Concentrate be manufactured using material from a country listed as being low risk for BSE. The review group thought that it would be important to clarify that the Tripartite refer to the list that is in use for North America and not the one used by the European Union.

6. Improve the system for responding to outbreaks of foreign animal diseases (FAD) by doing the following:

- *Develop equivalent Tripartite measures that follow World Trade Organization and OIE standards for zoning, regionalization and trade.* The exercise pointed out the need for standards in each country for zoning, regionalization and trade in the event of an outbreak. It appeared that players wanted to work on these issues during the exercise, but due to the nature of the exercise, there was not time. This would be true in the event of an actual outbreak too. The review group recommends developing equivalent standards in each country as soon as possible so that negotiating is completed by the next exercise or in the case of an actual outbreak.
- *Invest more money and time in preparing to respond to outbreaks of foreign animal diseases.* It was clear during the exercise that the impact of an FMD outbreak would be significant. One way to ensure that the Tripartite is better prepared is to establish the Tripartite Emergency Management Working Group and allow the group the time to make sure these recommendations are followed. Also, the review team suggests that each country consider sources of funds for recovery such as a contingency fund or some sort of insurance program. Finally, many players arrived at the exercise sites unprepared to play and unfamiliar with the plans used. Responders need to take the time to prepare to respond. This involves formal training, planned exercises and just having time to become familiar with the plans and policies that guide local, country and tripartite responses.
- *Share information across countries (harmonize data fields used).* During the exercise, there was some confusion about how data was collected in the field and there were no common definition of the data fields being used. The review group has emphasized the need for more communication among the Tripartite countries during an outbreak. One way to facilitate the communication and sharing of information would be to harmonize the data fields used to collect the information about the outbreak as it is occurring. If data fields are harmonized, information can be shared not only verbally and in writing but electronically as well.
- *Harmonize animal health emergency management terminology among the tripartite countries (use equivalent definitions).* In some cases during the exercise, the communication among the countries was hampered because the emergency management terminology used was not the same or at least equivalent. This is in addition to the problems encountered by the translation needed between English and Spanish mentioned earlier in this report. If all three countries could develop a lexicon of equivalent emergency response terminology, communication would be facilitated.
- *Explore use of standard emergency response system (such as Incident Command System for all tripartite countries).* If it were possible to adopt a standard emergency response system for all of North America, it would not only enhance the communication, but also make it easier for unaffected Tripartite countries to send trained personnel that would be ready to help more quickly when sent to an outbreak in one of the other countries. The Tripartite Emergency Management Working Group could explore standard systems for emergency response.

- *Plan to orient responders to documents in use when they arrive to help. Have someone available during the response to the outbreak who is very familiar with the documents.* The review group observed during the exercise that many were not familiar with the documents being used in the outbreak. These recommendations would help with the transition from other work to responding to an outbreak, but nothing substitutes for players and responders being familiar with the plans and documents being used.
- *Develop a tripartite exercise program.* The exercise pointed out many aspects of the response that need to be improved. The review group thinks that there is a need for regularly scheduled exercises at local, national and Tripartite levels. Some of the exercises can be limited drills rather than full, functional exercises. A schedule should be established for regular Tripartite functional exercises so that actions taken as a result of this exercise can be exercised and reassessed. The review group recommends that the focus of the next functional Tripartite exercise should be on the interaction and sharing of information between response teams in each country when an outbreak is close to a tripartite border.

7. Improve future exercises by doing the following:

- *Spend more time orienting players to the ground rules and the depth of play.* There was much confusion about the interaction that was expected between the headquarters players and the field players. These rules need to be clarified in the opening day orientation.
- *Spend more time orienting players to the use of the plans.* Just as it is important to orient responders to the plans being used, it is important to practice this during exercises.
- *Have “experts” in the use of the plan available for consultation.* Again, just as it is important to have an expert in the use of plans available during an outbreak, it is important to practice this during exercises.
- *Provide time for people to review plans in advance of the exercise.* While orienting players to the use of the plans and having an expert available help, nothing substitutes for being familiar with the plans. If people are given time in advance of the exercise and given a clear expectation, more players would come to the exercise prepared. Pre-exercise drills in the use of the plans should be an individual country responsibility prior to subsequent Tripartite exercises.

List of Recommendations

The following is a summary list of the recommendations in an action plan format. To implement the recommendations, people need to be assigned and a deadline given to each action:

Action	Who	Due Date
1. Develop an on-going Tripartite Emergency Management Working Group.		
2. Revise the Tripartite Animal Health Emergency Communication Plan to:		
a. Clarify definitions for the presumptive and confirmed diagnosis (so that all three countries agree) and the communication associated with each diagnosis.		
b. Prompt CVO's or other appropriate personnel to talk to each other if agro-terrorism is suspected.		
c. Encourage each country to have someone (other than the CVO) responsible for tracking the completion of the communication tasks outlined in the plan and communicating progress within each country.		
d. Encourage sharing of information at an operational level during an outbreak.		
e. Authorize headquarters and field personnel to communicate with their tripartite counterparts during an outbreak.		
f. Clear direction for the US CVO to communicate to the Contracting Officer's Representative (COR) how the vaccine doses will be split among the three countries and how the doses for each country will be delivered.		
3. Incorporate the use of the Decision Tree/Matrix more effectively into the response of each country by doing the following:		
a. Incorporate the Decision Tree/Matrix into the response plans in each country.		
b. Train those responsible for making the decision on the use of vaccine to use the Decision Tree/Matrix effectively.		
c. Train epidemiologists in each country to use the model as a tool for understanding disease spread parameters.		
d. Explore disposition of vaccinated animals (Industry should be involved in this discussion).		
4. Revise the Protocol for the FMD Vaccination		

Action	Who	Due Date
Program to include:		
a. The proposed Protocol for the Identification of FMD Vaccinated Animals Through Final Disposition.		
b. A revised Vaccine Distribution Plan.		
c. Clear direction for the US CVO to communicate to the Contracting Officer's Representative (COR) how the vaccine doses will be split among the three countries and how the doses for each country will be delivered.		
d. Include a schedule for regular periodic reviews of the strains of FMD covered by the stocks of VAC in the NAFMDVB.		
e. Include standards for movement of vaccinates and their products among the tripartite countries.		
f. Designated backups to the COR and COTR.		
5. Clarify the following about the NAFMDVB Contract		
a. Validate that the A-81 VAC is low risk for BSE.		
b. Clarify what list is to be used to determine acceptable (low) risk for BSE.		
6. Improve the system for responding to outbreaks of foreign animal diseases (FAD) by doing the following:		
a. Develop and harmonize Tripartite standards for zoning, regionalization and trade.		
b. Invest more money and time in preparing to respond to outbreaks of foreign animal diseases.		
c. Share information across countries (harmonize data fields used).		
d. Harmonize animal health emergency management terminology among the tripartite countries (use equivalent definitions).		
e. Explore use of standard emergency response system (such as Incident Command System for all tripartite countries).		
f. Plan to orient responders to plans in use when they arrive to help. Have someone available during the response to the outbreak who is very familiar with the plan.		
g. Develop a tripartite exercise program.		
7. Improve future exercises by doing the following:		
a. Spend more time orienting players to the ground rules and the depth of play.		
b. Spend more time orienting players to the use of the plans.		

Action	Who	Due Date
c. Have “experts” in the use of the plan available for consultation.		
d. Provide time for people to review plans in advance of the exercise.		